

## CLAIMS

1. (currently amended) Device for temporal slaving in a packet data transmission network comprising:

a local reception clock, where each incoming data packet comprises  
comprising a time label; - the said device comprising

a means of temporary storage, intended to receive the for receiving  
packets received from the said network and said storage having a  
storage capacity able to record for recording data received for a  
predetermined time (IPDV) dependant dependent on the  
characteristics of the network,

- the said device furthermore comprising

- a means for regenerating a local reception clock as a function of  
the time label of the incoming packets,

- a means for reading the data in the means of temporary storage  
at an instant dependant on the said predetermined time (IPDV) and on  
the regenerated local reception clock;[.]

wherein the means for regenerating a local reception clock comprises  
sub means for accumulating said difference between the time labels of  
the incoming packets and the local reception clock during a period of  
time and a sub means for modifying in a non-linear manner the local  
reception clock according to said difference

- a differentiator for calculating a difference between the time label and  
the regenerated local reception clock,

- a means for accumulating said difference between the time labels of  
the incoming data packets and the local reception clock during a period  
of time and

- a decision means for comparing the said summing and the local clock  
and modifying the regenerated local reception clock according to said  
comparison.

2. (previously presented) Device according to Claim 1, wherein the  
means of reading the data in the means of temporary storage are

adapted for reading the data in the means of temporary storage when the difference between the said predetermined time and the regenerated local clock is greater than the value of the time label of the next packet to be output from the means of temporary storage.

Claim 3 (cancelled)

4. (currently amended) Device according to claim 1 wherein it comprises additionally comprising a means of reducing the convergence time on start-up.

5. (currently amended) Device according to claim 1 wherein it comprises additionally comprising a means of reducing the phase noise.

6. (currently amended) Device according to Claim 4, wherein the means of reducing the phase noise comprises a digital low-pass filter.

7. (currently amended) Device according to claim 1 wherein it comprises additionally comprising a comprises means of generating artificial noise.

8. (currently amended)) Method of temporal slaving in a device of a packet data transmission network, each incoming data packet comprising comprises a time label, said device comprising a local clock the said method comprising;

a step of temporary storage of the incoming data packets received from the said network and-wherein

during the storage step, the data are being stored for a predetermined time dependent dependant on the characteristics of the network, the said method furthermore comprising

a step of regenerating a local reception clock as a function of the time label of the incoming packets,

a step of reading the data in the means of temporary storage means at an instant dependent on the said predetermined time and on the regenerated local reception clock.

wherein during the regenerating step

- calculating a time difference between the time label and the regenerated local reception clock,
- accumulating said time difference between the time labels of the incoming data packets and the local reception clock during a period of time and
- comparing said summing and the local clock and modifying the regenerated local reception clock according to said comparison.